Claims:

1. A video on demand headend for distributing video on demand to one or more groups of subscribers wherein each group of subscribers is serviced by one or more modulators connected to the headend wherein each modulator modulates the video on demand data at a different frequency, the headend comprising:

a video server;

an application server connected to the video server;

means for periodically generating a unique identification packet for each group of subscribers;

means for receiving a request for video on demand data from a subscriber, the request comprising the unique identification packet for the group of subscribers to which the subscriber belongs, the request for particular video on demand data and a unique subscriber identifier; and

means for selecting a modulator from the one or more modulators servicing the group of subscribers to which the subscriber belongs based on the unique identification packet.

2. The headend of Claim 1, wherein the application server further comprises means for assigning a program slot associated with the selected modulator to the requested video on demand data and means for communicating the selected modulator and the assigned program slot to the subscriber so that the subscriber terminal is configured to receive the requested video on demand data.

3. The headend of Claim 1 further comprising a two-way communications path between the headend and the one or more subscribers wherein the video on demand data request and the selected modulator and assigned program slot are communicated over the two-way communications path.

4. The headend of Claim 3, wherein the return path communicator further comprises a communications network connected to the headend and a modem connected between the one or more groups of subscribers and the communications network so that two-way data is communicated between the headend and the one or more groups of subscribers.

5. A video on demand system for distributing video on demand, comprising:

a headend having a video server and an application server;

one or more modulators connected to the headend, one or more groups of subscribers each being serviced by one or more modulators, the one or more modulators servicing a particular group of subscribers modulating the video on demand data at different frequencies so that the modulated signals to the particular group of subscribers share the same physical media;

the headend further comprising means for assigning a unique plant identifier for each group of subscribers so that video on demand data destined for a particular group of subscribers is modulated using the one or more modulators that service that particular group of subscribers.

6. The system of Claim 5 further comprising a return path communicator for receiving data from the subscribers and communicating data to the subscribers; and one or more subscriber terminals within each group of subscribers, each subscriber terminal further comprising means for receiving the unique plant identifier periodically transmitted by the headend to the group of subscribers and means for communicating a data request to the application server of the headend via the return path communicator to request that video on demand data is sent to the subscriber, the data request comprising the unique plant identification, the data request and a unique subscriber terminal identification; the headend further comprising means for selecting a modulator from the one or more modulators that service the particular subscriber, means for assigning a program slot in the selected modulator to the data requested by

the subscriber and means for communicating the selected modulator and program slot to the subscriber via the return path communicator so that the subscriber terminal configures itself to receive the requested video of demand data.

7. The system of Claim 6, wherein the return path communicator further comprises a communications network connected to the headend and a modem connected between the one or more groups of subscribers and the communications network so that two-way data is communicated between the headend and the one or more groups of subscribers.

8. A video on demand delivery method for distributing video on demand to one or more groups of subscribers wherein each group of subscribers is serviced by one or more modulators connected to a headend, each group of subscribers being assigned a unique plant identification, the method comprising:

receiving the unique plant identification by a particular subscriber;

generating a video on demand data request by the particular subscriber to the headend, the video on demand data request including the unique plant identification, the data request and a unique subscriber identification; and

selecting, at the headend, a modulator from the one or more modulators assigned to the group of subscribers that the particular subscriber is part of, based on the unique plant identification.

9. The method of Claim 8 further comprising assigning a particular program slot from the selected modulator to the requested video on demand data, forwarding the particular program slot and the selected modulator information from the headend to the terminal of the particular subscriber, and configuring the terminal of the particular subscriber to receive the requested video on demand data.